NORTH CAROLINA DIVISION OF **AIR QUALITY**

Application Review

Issue Date: November ##, 2017

Region: Washington Regional Office

County: Craven

NC Facility ID: 2500159

Inspector's Name: Robert Bright **Date of Last Inspection:** 07/25/2017

Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Fleet Readiness Center East

Facility Address:

Fleet Readiness Center East

A Street - Marine Corps Air Station

Cherry Point, NC 28533

SIC: 9711 / National Security NAICS: 92811 / National Security

Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V

Permit Applicability (this application only)

SIP: 15A NCAC 2Q .0513 (renewal)

NSPS: N/A

NESHAP: 40 CFR 63 Subpart DDDDD

40 CFR 63 Subpart PPPPP

PSD: N/A

PSD Avoidance: N/A NC Toxics: N/A 112(r): N/A Other: N/A

Contact Data

Facility Contact Matthew Willis Air Quality Program Col. Manager (252) 464-7046 PSC Box 8021 Cherry Point, NC 28533+0021

Authorized Contact Clarence Harper III

A Street-MCAS Cherry Point, NC

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Application Data

Application Number: 2500159.16A, 16B, 16C &

and 16D

Date Received: 1/28/16, 2/12/16, 4/25/16, 7/12/16 **Application Type:** Renewal & modifications

Application Schedule: TV-Renewal,

modifications, and 502(b)(10)

Existing Permit Data:

Existing Permit Number: 05506/T43 Existing Permit Issue Date: 05/06/2015 **Existing Permit Expiration Date:** 10/31/2016

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2015	3.27	8.68	100.35	9.71	6.11	10.74	3.42 [Methylene chloride]
2014	3.66	12.28	71.74	13.65	9.33	12.67	5.81 [Methylene chloride]
2013	3.61	14.01	73.77	17.64	16.14	7.12	2.36 [Methylene chloride]
2012	3.43	14.71	87.31	17.49	13.47	9.33	4.04 [Methylene chloride]
2011	3.63	16.43	97.91	19.48	15.11	13.25	4.99 [Methylene chloride]

28533+0021

Review Engineer: Richard Simpson **Comments / Recommendations:** Issue 05506/T44

Review Engineer's Signature: Date: November ##, 2017

Permit Issue Date: November ##, 2017

Permit Expiration Date: October 31, 2022

I. Introduction:

Fleet Readiness Center East (FRCE) currently holds Title V Permit No. 05506T43 with an expiration date of October 31, 2016 for providing depot-level maintenance, engineering and logistics support for Marine Corps and Navy aircraft in Cherry Point, Craven County, North Carolina. The primary purpose of this application is for permit renewal, two modifications, and a 502(b)(10). The significant modification request 2500159.16B was submitted on February 12, 2016. The 502(b)(10) request 2500159.16C was submitted on April 25, 2016. The minor modification request 2500159.16D was submitted on June 29, 2016. The renewal application 2500159.16A was received on January 28, 2016, which was at least nine months prior to the expiration date, as required by General Permit Condition 3.K. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. The four applications (2500159.16A, .16B, .16C, and .16D) shall be consolidated during this renewal process.

II. Description of Facility:

The Fleet Readiness Center East (FRCE) is a tenant command aboard the Marine Corps Air Station (MCAS) at Cherry Point. MCAS Cherry Point is located in Craven County. This is the largest Marine Corps Air Base in the world. The FRCE sits on 150 acres of land and occupies over 100 building and structures, with approximately 1.5 million square feet under roof. The FRCE is charged with providing support for Marine Corps and Navy aircraft including the CH46 (dual rotors), CH53 (single rotor) helicopters, V-22 Osprey and various other aircraft including the F-35 in the military fleet and nine primary aircraft engines. Painting, bead blasting, anodizing and engine testing comprise the air quality related operations at this facility.

III. History/Background/Application Chronology

May 6, 2015, – Permit 05506T43 was submitted to the facility for a minor modification.

January 28, 2016 – Permit application **2500159.16A** was received for a Title V renewal and a permit acknowledgement was sent to the facility.

February 12, 2016 – Permit application **2500159.16B** was received for a significant modification in addition to an air toxics dispersion modeling report and a permit acknowledgement was sent to the facility.

April 25, 2016 – A notification for a Title V permit 502(b)(10) change **2500159.16**C was requested from the facility.

March 24, 2016 – A site visit was performed by permit engineers, Jeff Twisdale, Rahul Thaker, and Robert Bright with the facility manager Matthew Willis. The permit engineers suggested that the facility should request removal of applicable parts in the toxics section in the next permit.

May 31, 2016 – The facility was inspected by WRO engineer Robert Bright and the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of the inspection.

June 22, 2016 – By letter, the facility requested removal of applicable TAPs from the permit per February modeling report.

July 12, 2016 - Permit application **2500159.16D** was received for a minor modification and a permit acknowledgement was sent to the facility.

December 20, 2016 – An email was sent from the facility to permit engineer Jeff Twisdale that included updated forms and spreadsheets for the initial significant modification.

March 28, 2017 – A site visit was performed by permit engineer Richard Simpson with facility manager Matthew Willis. Mr. Willis requested simplification in the next permit where items can be grouped by like type sources instead of by building numbers.

April 13-24, 2017 – By email and phone conversations between facility manager Matthew Willis and permit engineer Richard Simpson, several updates and suggestions were sent since the initial modifications.

May 12-30, 2017 – By email and phone conversations between facility manager Matthew Willis and permit engineer Richard Simpson, a proposed insignificant activity list was provided and questions from the toxics report were answered. Sample calculations for potential toxics were also provided.

June 8 – July 10, 2017 - By email and phone conversations between facility manager Matthew Willis and permit engineer Richard Simpson, questions were clarified and Addendum 1 for the permit renewal was provided to change a significant source to an insignificant activity based on updated calculations.

July 31 – September 7, 2017 - By email and phone conversations between facility manager Matthew Willis and permit engineer Richard Simpson, questions were answered and additional information was sent to be included in the updated permit.

August 1, 2017 – The facility was inspected by WRO engineer Robert Bright and the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of the inspection.

September 7-22, 2017 – The facility, Washington Regional Office, and Stationary Compliance Section were requested by the Permitting Section to comment on the renewal and proposed modifications. Comments were received and included in the permit.

September ##, **2017** – DRAFT permit sent to public notice and EPA for review prior to issuance. The 30-day public comment period ended **October** ##, **2017** with the receipt of no comments. The 45-day EPA review period ended **November** ##, **2017** with the receipt of no comments.

IV. Permit Modifications/Changes and ESM Discussion

The following table describes all changes made from previous permit 05506T43 as part of the renewal and proposed permit modifications.

Page(s)	Section	Description of Change(s)
Cover and	Throughout	Updated all tables, dates, and permit revision numbers.
throughout		
Throughout	Throughout	Corrected the regulatory reference from 2D and 2Q to 02D and 02Q.
Throughout	Throughout	Corrected wording change from assure to ensure.
Attachment	Insignificant	Updated the Attachment to have the emission sources grouped as like type
1	Activities	sources instead of sources grouped by Buildings.
Attachment	Insignificant	Updated the Attachment to include the appropriate control device with the
1	Activities	correct emission source.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant	Updated the Attachment to include the fuel and horsepower for all
1	Activities	generators or backup water pumps that is subject to MACT ZZZZ.
Attachment	Insignificant	In Building 83, sources IC0093 (Hot Wax Pot) and ID0057 (Hot Wax
1	Activities	Booth) were deleted since the emission sources are tracked elsewhere.
Attachment	Insignificant	In Building 83, source ID0058 (Welding Booth) was deleted since the
1	Activities	emission source has been removed.
Attachment	Insignificant	In Building 84, source IB0116 (Abrasive Blasting Glovebox) was deleted
1	Activities	since the emission source has been removed.
Attachment	Insignificant	In Building 129, source ID0065 (Hot Wax Booth) was deleted since the
1	Activities	emission source is tracked elsewhere.
Attachment	Insignificant	In Building 133, IE00 and IE0095 descriptions were changed from
1	Activities	"Process Tanks" to "Solvent Cleaning".
Attachment	Insignificant	In Building 133, the following insignificant activities with descriptions
1	Activities	were calculated and reclassified as significant sources per February 2016
1	7 ictivities	permit modification: IA0178 (Painting-Sermetal Spray Booth) and IB0040
		(Solvent Cleaning Spray Booth). Both are now located in Section 1 and
		Section 2.1 A. and Section 2.1 I. The source ID was updated by deleting
		the "I". A0178 and B0040 are now subject to MACT, Subpart GG.
Attachment	Insignificant	In Building 133, the following Accessory Testing sources were deleted
1	Activities	since there are no emissions: IE0040, IE0042, IE0044, IE0047, IE0049,
1,	7 ictivities	IE0050, IE0051, IE0052, IE0053, IE0054, IE0055, IE0056, IE0057,
		IE0058, IE0059, IE0060, IE0061, IE0062, IE0063, IE0065, IE0066,
		IE0067, IE0068, IE0069, IE0070, IE0071, IE0072, IE0078, IE0079,
		IE0085, IE0094, IE0161, IE0162, IE0163, IE0166, IE0167, IE0168,
		IE0169, IE0170, IE0182, IE0183, IE0184, IE0185, and IE0186.
Attachment	Insignificant	In Building 133, sources IB0050 (Metal Coating Ivadizer), IA0201
1	Activities	(Mixing Booth), ID0043, ID0082, and IE0005 (NDI Processes) were
1	Activities	deleted since they are tracked elsewhere.
Attachment	Insignificant	In Building 133, sources IE0002, IE0003, and IE 0004 (NDI Processes)
Attachment 1	Activities	were deleted since they are combined with IE0001. Source description for
1	Activities	IE0001 was updated from "Fluorescent Penetrant Tank" to "NDI Line".
Attachment	Insignificant	In Building 133, the following Electric Oven sources were deleted since
Attachment 1	Activities	there are no emissions: IA0006, IA0008, IA0013, IA0014, IA0015,
1	Activities	IA0074, IA0199, IA0200, IA0202, IA0203, IB0048, IB0077, IB0082,
		IB0088, IB0103, IB0104, IB0130, IB0131, IB0133, and IB0134.
Attachment	Insignificant	In Building 133, the following Electric Oven sources were deleted since
1	Activities	they are tracked elsewhere: IA0016, IA0020, IA0070, and IA0119.
Attachment		In Building 133, the following sources with descriptions were deleted
Attachinent	Insignificant Activities	since they have been removed: IA0100 (Parts Washing), IA0007 and
1	Activities	IA0116 (Process Tanks), IA0142 and IA0196 (Solvent Cleaning
		Degreasers), IA0198, IE0008, IE0009, and IE0010 (Solvent Cleaning
Attachment	Incignificant	Spray Booths), and IE0025 (Solvent Cleaning Glovebox).
Attachinent	Insignificant	In Building 133, the following sources with descriptions were deleted
1	Activities	since are no emissions: IB0132 (Process Oil Tank), IA0073 (Process Ventilation), IA0155 and IA0156 (Storage Tanks)
A 44 a a1 (In all and Company	Ventilation), IA0155 and IA0156 (Storage Tanks).
Attachment	Insignificant	In Building 133, the following sources with descriptions were deleted they
1	Activities	are tracked elsewhere: IA0204 and IA0205 (Process Ventilation) IB0086
		and IC0091 (Storage Tanks).

Page(s)	Section	Description of Change(s)
Attachment	Insignificant	In Building 133, the following Welding Booth sources were deleted since
1	Activities	they have been removed: IA0012, IA0101, IA0102, IA0103, IA0105,
		IA0106, IA0107, and IA0115.
Attachment	Insignificant	In Building 133, the February 2016 permit modification request that an
1	Activity	existing process tank be included as source ID No. IE0014.
Attachment	Insignificant	In Building 137, the following insignificant activities with descriptions
1	Activities	were calculated and reclassified as significant sources per February 2016
		permit modification: ID0116 (Assembly Testing) and IA0145 (Process
		Tank). Both are now located in Section 1 and Section 2.1 G. and C. The
		updated source ID deleted the "I". New description changes to D0116 is
		(distillate/distillate equivalent fuel-fired turbine engine-APU test cell) and
		A0145 is (Paint stripping tank). D0116 is now subject to 40 CFR Part 63,
		Subpart PPPPP.
Attachment	Insignificant	In Building 137, the February 2016 permit modification request that a new
1	Activity	grinding/sanding booth be installed as source ID No. ID0227. The new
		source is classified as an insignificant activity. ID0227 is controlled by
		new control device CD-ID0227 which is a dry cartridge filter followed in
		series by a HEPA filter.
Attachment	Insignificant	In Building 137, the following sources with descriptions were deleted they
1	Activities	were removed: IC0037 (Abrasive Blasting Glovebox), ID0133 (Sanding
		Booth), ID0145 (Parts Washer), ID0179 (Process Stripping Tank), IC0064
		(Process Ventilation Booth), IA0144, IC0063, and ID0035 (Solvent
A 1	T 101	Cleaning Booths).
Attachment	Insignificant	In Building 137, the following Accessory and Assembly Testing sources
1	Activities	were deleted since they have no emissions: IC0007, ID0049, ID0050,
		ID0087, ID0088, ID0153, ID0154, ID0155, ID0156, ID0157, ID0158, and
A 44 0 0 lo 10 0 0 14	InsiemiCasut	ID0212.
Attachment	Insignificant	In Building 137, the following sources with descriptions were deleted
1	Activities	since they have no emissions: ID0119 (Bonding and Curing Autoclave),
		IA0121 (Heat Treatment System), and IC0069 (Metal Working Laser Machining).
Attachment	Insignificant	In Building 137, the following sources with descriptions were deleted
Attachment	Activities	since they are tracked elsewhere: IC0080 and IC0129 (Engraving Laser
1	Activities	Machine), IA0143 (Graphics Processing Tank), ID0144 (Sanding Room),
		IC0043 (Metal Coating Braze Booth), IC0118, ID0002, ID0010, ID0012,
		ID0013, ID0142, and ID0143 (Mixing Booths), ID0139 (Molding Mixing
		Booth), and, ID0098, ID0101, ID0210 (NDI Processes Magnetic
		Inspection).
Attachment	Insignificant	In Building 137, the following NDI Processes sources were deleted since
1	Activities	they were combined with source ID0042: ID0083, ID0084, ID0085, and
1	1101111105	ID0086. Source description for ID0042 was updated from "Ultraviolet
		Inspection Area" to "NDI Line".
Attachment	Insignificant	In Building 137, the following Electric Oven and Furnace sources were
1	Activities	deleted since they have no emissions: IC0016, IC0018, IC0020, IC0023,
		IC0024, IC0025, IC0026, IC0027, IC0029, IC0033, IC0038, IC0039,
		IC0040, IC0090, IC0131, IC0136, IC0137, IC0138, IC0139, IC0140,
		ID0128, ID0166, ID0174, ID0214, and ID0215.
		100120, 100100, 100174, 1100214, and 1100213.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant	In Building 137, the following Electric Oven and Furnace sources were
1	Activities	deleted since they are tracked elsewhere: IC0059, IC0068, IC0073,
		ID0014, ID0015, ID0040, ID0074, ID0110, ID0111, ID0118, and ID0198.
Attachment	Insignificant	In Building 137, the Electric Oven and Furnace source IC0032 was deleted
1	Activities	since it was combined with source IC0017.
Attachment	Insignificant	In Building 137, the following sources with descriptions were deleted
1	Activities	since they are tracked elsewhere: ID0017 (Anodizing Tank), IC0132,
		IC0133, IC0134, and ID0209 (Process Tanks), IC0051 and IC0098
		(Process Laboratory Ventilation), IA0191, ID0011, ID0211, and ID0213
		(Solvent Cleaning) and IC0108 (Varsol Storage Tank).
Attachment	Insignificant	In Building 137, the following sources with descriptions were deleted
1	Activities	since they have no emissions: ID0180 and ID0181 (Process Ventilation
		Pump), and IC0109, IC0110, IC0113, and IC0116 (Storage Tanks).
Attachment	Insignificant	In Building 139, the following Grinding and Sanding Booth sources were
1	Activities	deleted since they have been removed: IC0076, IC0077, and IC0078.
Attachment	Insignificant	In Building 154, the following Storage Tank sources were deleted since
1	Activities	they have been removed: IA0182 and IA0183.
Attachment	Insignificant	In Building 154, the following Storage Tank sources were deleted since
1	Activities	they have no emissions: IE0173 and IE0174.
Attachment	Insignificant	In Building 155, the Storage Tank source, IE0175, was deleted since it has
1	Activities	no emissions.
Attachment	Insignificant	In Building 188, the following sources with descriptions were deleted
1	Activities	since they have been removed: ID0201 (NDI Processes), and ID0063 and
		ID0064 (Electric Oven).
Attachment	Insignificant	In Building 245, the Mixing Booth source, ID0104, was deleted since it is
1	Activities	tracked elsewhere.
Attachment	Insignificant	In Building 423, the following Lab Process Hood sources were deleted
1	Activities	since they are tracked elsewhere: ID0202, ID0203, and ID0204.
Attachment	Insignificant	In Building 1006, the following Propane Storage Tank sources were
1	Activities	deleted since they have no emissions: ID0190 and ID0191.
Attachment	Insignificant	In Building 1379, the Propane Storage Tank source, ID0192, was deleted
1	Activities	since it has no emissions.
Attachment	Insignificant	In Building 1380, the Propane Storage Tank sources, ID0193 and ID0194,
1	Activities	were deleted since they have no emissions.
Attachment	Insignificant	In Building 1665, the Process Tank source, IC0135, was deleted since it is
1	Activities	tracked elsewhere.
Attachment	Insignificant	In Building 1694, the Propane Storage Tank source, IE0189, was deleted
1	Activities	since it has no emissions.
NA	NA	In Building 1798, existing source IH0003 was inserted. The direct contact
		propane-fired heater is rated at 0.75 million BTU/hr. The new ID was
	*	combined with H1000 in the previous permit which has been deleted.
Attachment	Insignificant	In Building 1798, the Mixing Booth source, ID0160, was deleted since it is
1	Activities	tracked elsewhere.
Attachment	Insignificant	In Building 1798, the following Propane Storage Tank sources, were
1	Activities	deleted since they have no emissions: ID0186, ID0187, and ID0188.
Attachment	Insignificant	In Building 3402, the Engine Test Cell source, IA0059, was deleted since
1	Activities	it has been removed.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant	In Building 3402, the February 2016 permit modification request that an
1	Activity	existing direct contact propane-fired heater rated at 6.24 million BTU/hour
		be included as source ID No. IA0075.
Attachment	Insignificant	In Building 3767, the February 2016 permit modification request that a
1	Activity	new abrasive blasting glovebox be installed as source ID No. ID0228. The
		new source is classified as an insignificant activity. ID0228 is controlled
		by new control device CD-ID0228 which is a dry cartridge filter followed
		in series by a HEPA filter.
Attachment	Insignificant	In Building 3767, the Electric Oven source, ID0055, was deleted since it
1	Activities	has no emissions.
Attachment	Insignificant	In Building 3767, the Process Ventilation source, ID0117, was deleted
1	Activities	since it is tracked elsewhere.
Attachment	Insignificant	In Building 3768, the Electric Oven source, ID0067, was deleted since it
1	Activities	has no emissions.
Attachment	Insignificant	In Building 3981, Emergency Generator IC0101 and Storage Tank
1	Activities	IC0112, were deleted since they are air station sources.
Attachment	Insignificant	In Building 4032, existing source IH0004 was inserted. The direct contact
1	Activities	propane-fired heater is rated at 3.3 million BTU/hr. The new ID was not
		identified in previous Title V permits.
Attachment	Insignificant	In Building 4032, existing source IH0005 was inserted. The propane-fired
1	Activities	source is rated at 0.15 million BTU/hr and subject to Case by Case MACT
		and MACT DDDDD. The new ID was combined with H1000 in the
		previous permit which has been deleted.
Attachment	Insignificant	In Building 4032, IA0139 description was changed from "Process Tanks"
1	Activities	to "Chemical Stripping-Paint Stripping Tank".
Attachment	Insignificant	In Building 4032, insignificant activity IT0184 (Process Tanks-Zinc nickel
1	Activities	plating) was calculated and reclassified as significant sources per February
		2016 permit modification. The updated source ID is T0184 with
		description "Zinc nickel plating tank" located in Section 2.1 F. The source
		is controlled by existing scrubber AOH4.
Attachment	Insignificant	In Building 4032, the following sources with descriptions were deleted
1	Activities	since they have no emissions: IA0037 and IA0177 (Lab Process Fog
		Chambers), IA0036, IA0193, IA0194, IA0195, IB0053, and IB0054
		(Electric Oven), and IA0152 (Propane Storage Tank).
Attachment	Insignificant	In Building 4032, the following sources with descriptions were deleted
1	Activities	since they are tracked elsewhere: IA0038, IA0039, IA0040, IA0041,
		IA0042, IA0043, IA0044, IA0045, IA0046, IA0047, IA0048, and IA0176
		(Lab Process Hoods and Equipment), IA0080 and IA0192 (NDI Processes)
		and IA0126 (Process Conversion Tank).
Attachment	Insignificant	In Building 4032, the following sources with descriptions were deleted
1	Activities	since they have been removed: IB0057 (Parts Washer) and IA0181
		(Storage Tank).
Attachment	Insignificant	Source IC0120 (Paint Spray Gun Cleaning) was in Building 4032 but the
1	Activities	source was moved to Building 245.
Attachment	Insignificant	In Building 4034, the following sources with descriptions were deleted
1	Activities	since they are tracked elsewhere: ID0004 (Leak Testing Repair) and
		ID0003 and ID0005 (Electric Oven).

Page(s)	Section	Description of Change(s)
Attachment	Insignificant	In Building 4035, the following sources with descriptions were deleted
1	Activities	since they have been removed: IP0002 (Electric Oven), IT0109, IT0114,
		and IT0118 (Process Tanks).
Attachment	Insignificant	In Building 4035, the Leak Testing Repair source, IP003, was deleted
1	Activities	since it is tracked elsewhere.
Attachment	Insignificant	In Building 4035, the following Storage Tanks sources were deleted since
1	Activities	they have no emissions: IP0006, IP0007, IP0008, and IP0009.
Attachment	Insignificant	In Building 4037, the Electric Oven source, ID0207, was deleted since it
1	Activities	has no emissions.
Attachment	Insignificant	In Building 4037, the following sources with descriptions were deleted
1	Activities	since they have been removed: ID0208 (Oven) and ID0206 (Storage
		Tank).
Attachment	Insignificant	In Building 4172, the Storage Tank source, IA0150, was deleted since it
1	Activities	has been removed.
Attachment	Insignificant	In Building 4173, the following sources with descriptions were deleted
1	Activities	since they have no emissions: IB0129 (Electric Oven), IB0020, IB0023,
		and IB0024 (Process Ventilation), and IA0151 (Propane Storage Tank).
Attachment	Insignificant	In Building 4173, the Parts Washer source, IA0081, was deleted since it
1	Activities	has been removed.
Attachment	Insignificant	In Building 4187, the NDI Processes source, ID0216, was deleted since it
1	Activities	is tracked elsewhere.
Attachment	Insignificant	In Building 4188, the Storage Tank sources, IA0154 and IA0180, were
1	Activities	deleted since they have no emissions.
Attachment	Insignificant	In Building 4224, the following sources with descriptions were deleted
1	Activities	since they have no emissions: IB0122 and IB0136 (Bonding and Curing),
		IA0034, IB0089, IB0099, IB0102, IB0125, IB0126, IB0127, and IB0135
		(Electric Ovens), and IC0122 and IC0123 (Process Ventilation).
Attachment	Insignificant	In Building 4224, the following sources with descriptions were deleted
1	Activities	since they are tracked elsewhere: IB0058 and IB0098 (Mixing Booths),
		IB0051, IB0061, IB0062, and ID0001 (Electric Oven), IB0128 (Process
		Tank), and IA0129 (Solvent Cleaning).
Attachment	Insignificant	Source IB0085 (Storage Tank) was in Building 4224 but the source was
1	Activities	moved to Building 133.
Attachment	Insignificant	In Building 4225, IE0073 description was changed from "Battery
1	Activities	Maintenance" to "Pump (backup water)". The source is applicable to
		MACT ZZZZ conditions.
Attachment	Insignificant	In Building 4225, the Metal Coating Ivadizer source, IA0123, was deleted
1	Activities	since it has been removed.
Attachment	Insignificant	In Building 4225, the following sources with descriptions were deleted
1	Activities	since they are tracked elsewhere: IE0159 (Mixing Booth), and IE0177
		(NDI Processes).
Attachment	Insignificant	In Building 4225, the following sources with descriptions were deleted
1	Activities	since they have no emissions: IB0093, IE0074, IE0075, IE0076, IE0077,
		IE0164, IE0180, and IE0181 (Electric Ovens and Furnaces), and IE0176
		(Propane Storage Tank).
Attachment	Insignificant	In Building 4225, the Hydrogen Diffusion Furnace sources, IE0092 and
1	Activities	IE0171, were deleted since they have no regulated pollutants.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant	In Buildings 4466, 4470, 4497, 4498, 4528, and 4533, the following
1	Activities	Storage Tank sources were deleted since they have no emissions: ID0195,
		IA0159, IA0160, IB0119, IB0120, IA0184, IA0185, IA0187, IA0188,
		IA0189, and IB0143.
Attachment	Insignificant	In Buildings 4528, 4561, and V22, the following sources with descriptions
1	Activities	were deleted since they are tracked elsewhere: IA0186 (Storage Tank),
		IA0127 (Solvent Cleaning), ID0217 Bonding Room, ID0220 (Electric
A 1	T	Oven), and ID0219 (Process Ventilation).
Attachment	Insignificant	Source ID0218 (Sanding Booth) in the previous permit was located in
1	Activities	building V22 but the actual building number is revised to Building 4808.
Attachment	Insignificant	Inserted * for Case by Case MACT and MACT DDDDD date information.
1	Activities List	Inserted DEO web link information in Item No. 2 at hottom of attachment
Attachment	Insignificant Activities List	Inserted DEQ web link information in Item No. 3 at bottom of attachment
2	Table of	as general information. Per request from the facility and to help eliminate redundancy, the sources
2	Contents	have been grouped by similar type sources instead of by building numbers
	Contents	in Section 2.1. Therefore, the buildings with page numbers were deleted.
		Several areas of Section 2.2 were also eliminated.
3	Section 1	Included column for page numbers.
3	Section 1	Added superscript "EAF (Existing Affected Source)" to the control device
3	Section 1	description for sources D0097 and D0184. Added superscript "NAF"
		(New Affected Source) to the control device description for sources A0178,
		D0053, D0182, D0183, D0205, D0221, and E0080. At the end of Section,
		both the EAF and NAF definitions are changed from "primer and topcoat
		application operations applicability" to "primer and topcoat application,
		and depainting operations applicability".
3-7 and 8-	Sections 1	Per request from the facility and to help eliminate redundancy, the updated
43	and 2.1.	permitted sources have been grouped by similar type sources instead of
		building numbers. In Section 1, the rows with the building numbers were
		deleted and a column with the building numbers was inserted. Section 2.1
2.0	g .: 1	is now organized from 2.1 AH.
3, 9	Sections 1	In Building 84, the previous permit source D0069 (paint booth) was in
	and	Section 2.1. 84.B. and now is grouped in Section 2.1 A.
2.0	2.1.84.B.	In Duilding 94 the provious populity source D0127 (was described
3, 8	Sections 1	In Building 84, the previous permit source D0127 (wood working
	and 2.1.84.A.	operation) was in Section 2.1. 84.A. and now is grouped in Section 2.1 H.
3, 9, 51	Sections 1,	In Building 129, the previous permit sources D0061 and D0066 (paint
3, 7, 31	2.1.129.A.,	booths) were in Section 2.1. 129.A. and now are grouped in Section 2.1 A.
	and	D0061 minimum pressure drop for the filter system was updated from 0.30
	2.2.A.2.g.ii.	to 0.25.
3, 15	Sections 1	In Building 133, the Accessory Test Stand sources, E0041 and E0064,
-,	and 2.1 133.E.	were deleted since they have no emissions.
3, 15, 80	Sections 1,	In Building 133, the following significant sources with descriptions were
	2.1 133.D.	calculated and reclassified as insignificant activities per February 2016
	and F., and	permit modification: A0130 (NDI Processes), and B0078, B0079, B0080,
	2.2 C.	and E0019 (Open Top Tanks). The updated source ID starts with "I" and
		regulation 15Å NCAC 02D .0958 in 2.2 C. is no longer applicable.

Page(s)	Section	Description of Change(s)
3, 9, 51	Sections 1, and 2.1.133.A	In Building 133, the previous permit sources A0019 and A0032 (paint booths) were in Section 2.1.133.A. and now are grouped in Section 2.1 A.
3, 13	Sections 1 and 2.1 133.C.	In Building 133, the facility request flexibility with source E0080 which would now be subject to 40 CFR 63, Subpart GG. The source description was changed from "abrasive blasting walk-in booth" to "abrasive blasting operation". In the previous permit, the source was located Section 2.1.133.C and now is grouped in Section 2.1 B. The previous permit pressure drop was TBD. In Section 2.1 B.1.d., the updated pressure drop range for the cartridge is 1.0-7.0 and for the HEPA filter is 0.9-2.25.
3, 11	Sections 1, and 2.1.133.B.	In Building 133, the previous permit high velocity oxygenated fuel (HVOF) thermal spray booth sources A0009, A0010, and A0011 were in Section 2.1.133.B. and now are grouped in Section 2.1 D. The previous permitted sources A009, A0010, and A0011 shared a HEPA filter. The updated permitted shared HEPA filter now has a new Source ID (CD-A0012) which is included in Section 1, Section 2.1 D. and 2.2 B.2.j., k., and p.
3-6, 20, 28, 37	Sections 1, 2.1 133.E., 2.1 137.D., 3402,A., and 2.1 4188.A.	In Buildings 133, 137, 3402, and 4188, the previous permit engine test cells/stands A0001, A0002, A0003, A0004, D0147, D0148, D0149, D0150, D0151, D0152, A0077 and A0058 were in Sections 2.1 133.E., 2.1 137.D., 2.1 3402.A., and 2.1 4188.A. and now are grouped in Section 2.1 G. The sources are now subject to 40 CFR Part 63, Subpart PPPPP "MACT Standards for Engine Test Cells/Stands" and the updated appropriate rule was inserted in Sections 1 and 2.1 G. ID description for all sources is updated to "distillate fuel/distillate equivalent fuel-fired turbine engine-APU test cell". For source A0077, deleted Section 1 description "T047".
3, 16, 22, 61, 80	Sections 1, 2.1 137.A and H., and 2.2 C.	In Building 137, the following significant sources with descriptions were calculated and reclassified as insignificant activities per February 2016 permit modification: C0004 (Solvent Cleaning), and C0036 (Open Top Tank). The updated source ID starts with "I" and regulation 15A NCAC 02D .0958 in 2.2 C. is no longer applicable.
4, 22, 88	Section 1, 2.1 137.I, and 2.2 D.	In Building 137, D0113 and D0114 are now classified as insignificant activities with the new identifications being ID0113 and ID0114. The sources are subject to Case by Case MACT and MACT DDDDD. The units are propane-fired and rated at 5.99 million BTU/hr each. Per February 2016 permit modification, source ID0113 will be replaced with essentially an identical piece of equipment.
5, 27, 81	Section 1, 2.1 137.I, and 2.2 D.	In Building 137, C0017 is now classified as an insignificant activity with the new identifications being IC0017. The source is subject to Case by Case MACT and MACT DDDDD, the unit is propane-fired and rated at 0.2 million BTU/hr. Per February 2016 permit modification, the source will be replaced with essentially an identical piece of equipment.
4, 16, 49	Sections 1, 2.1.137.B., and 2.2.A.2.g.ii.	In Buildings 137, paint booth D0033 with associated control device CD-D0033 were deleted since they have been removed from the facility.

Page(s)	Section	Description of Change(s)
4, 16, 49	Sections 1,	In Building 137, the previous permit paint booth sources C0005, C0056,
	2.1.137.B.,	C0062, D0008, D0009, D0036, and D0131 were located Section 2.1.
	and	137.B. and now are grouped in Section 2.1 A. C0056 pressure drop range
	2.2.A.2.g.ii.	for the filter system was updated from 0.1-2.0 to 0.10-0.75. D0036 AND
		D0131 maximum pressure drops for the filter systems were updated from
1.01		3.0 to 0.30.
4, 21	Sections 1	In Building 137, the previous permit source D0120 (Depainting/chemical
	and 2.1.137.E.	stripping area) was in Section 2.1. 137.E. and now is grouped in Section 2.1 C.
4, 21	Sections 1	In Building 137, D0097 source description was changed from "abrasive
	and	blast room" to "abrasive blasting operation." In the previous permit, the
	2.1 137.G.	source was located Section 2.1.137.G and now is grouped in Section 2.1 B.
3-4, 15-17,	Sections 1,	In Building 137, the following sources with descriptions were deleted
72	2.1 137.A.	since they have been removed: C0003, D0025, D0026, and D0027
	and C, 2.2 A.	(Solvent Spray Booth), D0016, and D0177 (Chromic Acid Anodizing
	and B.	Tank).
4, 16, 49	Sections 1,	In Building 245, the previous permit paint booth sources D0106, D0129,
	and 2.1 245.B.	and D0226 were located in Section 2.1.245.A. and now are grouped in
	2.1 243.B.	Section 2.1 A. Sources D0106 and D0129 description was changed from "paint booth hanger" to "paint booth". The description for CD-0129 was
		changed from "with eight three stage" to "with three cross flow stage".
50	Section	In Building 245, the previous permit control device CD-D0129 had stack
30	2.2 A.2.g.ii.	numbers 181 through 188. The updated stack numbers changed from 181
		to A and from 182 to B. Stacks 183 through 188 were eliminated since the
		stacks pressure drops are monitored only through stacks A and B.
5, 24	Sections 1,	In Building 423, the previous permit had source D0221 (laser depainting
	2.1 423.A.	system) in Section 2.1.423.A. and now is updated and grouped in Section
		2.1 B. For flexibility, the facility requested the source also be included in
		Section 2.1 C. which is subject to MACT GG "Chemical Depainting
		Operations".
7, 43, 81	Sections 1,	H1000 with source description as "Miscellaneous Boilers and Process
	2.1 MISC.A.	Heaters" has been removed from the permit. To improve the facility's
	and 2.2 D	ability to Comply with MACT DDDDD, H1000 has been modified to
		individually identify each unit as insignificant activities IH0003 (direct heat) and IH0005 (MACT DDDDD).
5, 25, 49-50	Sections 1,	In Building 1798, the previous permit paint booth source D0052, was in
3, 23, 15 30	2.1.1798.A.,	Section 2.1. 1798.A. and now is grouped in Section 2.1 A. D0052
	and	pressure drop range for the filter system was updated from 0.18-1.6 to
	2.2.A.2.g.ii.	0.05-1.60.
5, 26	Sections 1	In Building 1798, the facility requests flexibility with source D0053 which
	and	would now be subject to 40 CFR 63, Subpart GG. The source description
	2.1 1798.C.	was changed from "abrasive blasting walk-in booth" to "abrasive blasting
		operation". In the previous permit, the source was located Section
		2.1.1798.C. and now is grouped in Section 2.1 B. The previous permit
		pressure drop was TBD. In this permit, CD-D0053 is included in Section
		2.1 B.1.d. where the updated pressure drop range for the cartridge is 1.0-
		6.50 and for the HEPA filter is 0.7-2.5.

Page(s)	Section	Description of Change(s)
5, 27, 81	Section 1,	In Building 1798, H0001 and H0002 are now classified as insignificant
	2.1 137.I,	activities with the new identifications being IH0001 and IH0002. The
	and 2.2 D.	direct contact, propane-fired units are rated at 5.99 million BTU/hr each.
5, 6, 25, 31,	Sections 1,	In Buildings 1798, 4032, and 4035, the following significant sources with
33, 36, 80	2.1 1798.B,	descriptions were calculated and reclassified as insignificant activities per
	2.1 4032.B.,	February 2016 permit modification: D0054 (Solvent Cleaning), A0138
	2.1 4035.A.	(NDI Processes), and T0087, T0191, T0195, T0201, and T0211 (Open
	and C., and	Top Process Tanks). The updated source ID starts with "I" and regulation
7.20	2.2 C.	15A NCAC 02D .0958 in 2.2 C. is no longer applicable.
5, 28	Sections 1,	In Building 3766, D0184 source description deletion of "corrosion hanger"
	and	was made. In the previous permit, the source was located Section
7 6 20 20	2.1 3766.A.	2.1.3766.G and now is grouped in Section 2.1 B.
5, 6, 29, 30,	Sections 1,	In Buildings 3767, 4032, and 4224, the previous permit paint booth
39	2.1.3767.A	sources D0056, A0179, B0101, were in Sections 2.1. 3767.A.,
	2.1.4032.A.,	2.1.4032.A., and 2.1.4224.B. but now are grouped in Section 2.1 A.
	and 2.1.4224.B.	
5, 30, 50	Sections 1,	In Buildings 4032, paint booth D0007 with associated control device
	2.1.4032.A.,	CD-D0007 were deleted since they have been removed from the facility.
	and	
	2.2.A.2.g.ii.	
5, 6, 31, 59	Sections 1	In Building 4034, D0182 source description was changed from "plastic
	and	media blast (PMB) hanger" to "abrasive blasting operation". In the
	2.1.4034.A.	previous permit, sources D0182, D0183 and D0205 were located Section
6 22 72	G .: 1	2.1.4034.A. and now are grouped in Section 2.1 B.
6, 33, 73	Sections 1,	In Building 4035, the previous permit chrome plating tank sources T0099,
	2.1.4035.B., and 2.2.B	T0100. T0105, T0106, T0155, and T0218, were in Sections 2.1.4035.B. but now are in Section 2.1.E. Since source is soluble and well below the
	and 2.2.D	TPER, the toxic section in 2.2 B. is no longer applicable.
6, 33, 73	Sections 1,	In Building 4035, the previous permit tank sources T0074. T0127, T0131,
	2.1.4035.B.,	and T0188 were in Sections 2.1.4035.A. but now are in Section 2.1.F. The
	and 2.2.B.2.	dashes were removed from associated control devices A-OH-2, A-OH-3,
	ung 2,2,2,2,	and A-OH-4. The facility requested flexibility and added existing
		scrubbers AOH1, CR1, and OH1 to toxic Section 2.2.B.2.d.and 2.2.B.2.f.
		In Section 2.2.B.2.f., the new pressure drop ranges are for the following
		scrubbers: AOH1 (0.4-2.0), CR1 (0.4-2.7), and OH1 (0.75-3.0).
6, 37, 80	Sections 1,	In Building 4037, significant source D0199 (adhesive coating booth)
	2.1 4037.A.,	recalculated and reclassified as an insignificant activity per July 10, 2017
	and 2.2 C.	Addendum 1 of the permit renewal. The updated source ID starts with "I"
		and regulation 15A NCAC 02D .0958 in 2.2 C. is no longer applicable.
5, 6, 25, 31,	Sections 1,	In Buildings 4188, 4224, and 4225, the following significant sources with
33, 36, 80	2.1 1798.B,	descriptions were calculated and reclassified as insignificant activities per
	2.1 4032.B.,	February 2016 permit modification: A0076 (Storage Tank), B0063
	2.1 4035.A.	(Bonding and Curing Autoclave), E0083 (NDI Processes), and E0141
	and C., and	(Solvent Cleaning). The updated source ID starts with "I" and regulation
	Section 2.2 C.	15A NCAC 02D .0958 in 2.2 C. is no longer applicable.

Page(s)	Section	Description of Change(s)
6, 40, 50	Sections 1,	In Building 4225, the previous permit paint booth source E0160, was in
	2.1.4225.B.,	Section 2.1. 4225.B. and now is grouped in Section 2.1 A. E0160
	and	minimum pressure drop range for the filter system was updated from 0.20
	2.2.A.2.g.ii.	to 0.1.
3, 11	Sections 1	In Building 4225, the previous permit high velocity oxygenated fuel
	and	(HVOF) thermal spray booth source E0165 was in Section 2.1.4225.E. and
	2.1.4225.E.	now is grouped in Section 2.1 D. Per February 2016 permit modification
		and April 25, 2016 502(b)10 request, E0165 will be replaced with
		essentially an identical piece of equipment and the most recent control
		device is included in Section 2.2 B.2. The previous pressure drop range
		for CD-E0165 was 1.0-6.0 for the combined system and now is updated to
		0.35-6.0 for the cartridge filter and 1.0-6.0 for the HEPA filter. In the
2 11 70	G .: 1	source description, the word "metal" was deleted.
3, 11, 70	Sections 1,	In Building 4225, the June 2016 permit modification request that previous
	2.1 D.,	insignificant activity HVOF source IE0089 to be replaced and updated to a
	2.2.B.2., and	significant source and named E0089. E0089 includes a new dry cartridge filter with HEPA filter CD-E0089 and the sources are now in Sections 2.1
	Insignificant Activities	D. and Section 2.2 B.2. (pressure drop range TBD). Per February 2016
	Activities	permit modification and updated information from the December 20, 2016
		email, a new HVOF thermal spray booth E0207 with a surface
		pretreatment process will be installed. The booth control device will be a
		wet scrubber (CD-E0207A) and the pretreatment process control device
		will be a high efficiency cyclone (CD-E0207B). E0207 and the control
		devices are in Sections 2.1 D. and Section 2.2 B.2. (pressure drop ranges
		TBD).
11	Section 2.1 A.	In updated Section 2.1 A.1.a., the visible emission language changed from
		"Visible emissions from paint spray booths shall" to "Visible emissions
		from all paint booths except for (ID No. C0056) shall".
14	Sections	In updated Sections 2.1 C.2.a. and 2.1 G.1.a, added "[15A NCAC 02D
	2.1 D.2.a. and	.0516]" to the end of the referenced regulation.
	2.1 G.1.a	
65	Section	Deleted the table since it is already located in Section 2.1 B.1.d.
	2.2 A 3.c.ii.	
67	Section	The previous Section of 2.2 B. (Toxic Air Pollutant Emission Sources) has
	2.2 B.1.	been reorganized based on a February 2016 facility permit application for
		an air toxic modeling demonstration approved by the Division of Air
		Quality per memo dated March 21, 2016. A facility letter dated June 20,
		2016 was also submitted requesting removal of applicable toxic rates.
		Updated Section 2.2 B.1. includes limitations for non-specific chromium
		(VI) compounds for non-MACT/NESHAP sources by source limits. All
		other previous source by source TAPs were well below the AAL and were
C 0	C - · · ·	deleted.
68	Section	Per approved March 21, 2016 modeling demonstration, updated Section
	2.2 B.2.a.	2.2 B.1.a. includes facility wide TAPs emission limitations above 50%
		AAL. The TAPs listed are maleic anhydride and non-specific chromium
		(VI) compounds including all MACT/NESHAP sources. All other
		previous facility wide TAPs are well below the AAL and deleted.

Page(s)	Section	Description of Change(s)
68	Section	Per approved March 21, 2016 modeling demonstration, updated Section
	2.2 B.2.bp.	2.2 B.2.bp. includes facility wide 15A NCAC 02D .1104 TAPs AAL
		limitations for nickel metal and nickel, soluble compounds, as nickel. The
		reporting requirements included updated pressure drop ranges for the
		scrubbers, cartridge filters, and HEPA filters. Per permit modification,
		CD-E0089 and CD-E0207 were added to this section.
80	Section 2.2 C.	In the previous permit, there were requirements for 15A NCAC 02D .0958:
		Work Practices for Sources of Volatile Organic Compounds in Section 2.2
		C. Per applicability of 15A NCAC 02D .0902 (e) and (f) as amended
		November 1, 2016, the facility's regulatory requirement for 15A NCAC
		02D .0958 no longer applies to Craven County.
81	Section 2.2 D.	In the previous permit, there were requirements for several small boilers
		and heaters in Section 2.2 D. As noted above, the sources were reclassified
		as insignificant activities and the section was deleted.
10-20	General	Updated to latest version of DAQ shell version 5.1 08/03/2017.
	Conditions	

There were changes made to the Title V Equipment Editor (TVEE) under this permit renewal.

V. Regulatory Review/Equipment Changes

The facility is currently subject to the following regulations:

- a. 15A NCAC 02D .0503, "Particulates from Fuel Burning Indirect Heat Exchangers"
- b. 15A NCAC 02D .0512 "Particulates from Miscellaneous Wood Products Finishing Plants"
- c. 15A NCAC 02D .0515, "Particulates from Miscellaneous Industrial Processes"
- d. 15A NCAC 02D .0516, "Sulfur Dioxide Emissions from Combustion Sources"
- e. 15A NCAC 02D .0521, "Control of Visible Emissions"
- f. 15A NCAC 02D .0524, "New Source Performance Standards (40 CFR 60, Subpart Kb)"
- g. 15A NCAC 02D .1100, "Toxic Air Pollutant Emissions Limitation and Reporting Requirements"
- h. 15A NCAC 2D .1109{112(J)} "Case-By-Case "Maximum Achievable Control Technologies"
- i. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart N)"
- j. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart GG)"
- k. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart ZZZZ)"
- 1. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart DDDDD)"
- m. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart PPPPP)"
- n. 15A NCAC 02Q .0711, "Facility Wide Toxic Air Pollutants Exemption Rate Emissions Limits"

An extensive review for each applicable regulation is not included in this document. Per applicability of 15A NCAC 02D .0902 (e) and (f) as amended November 1, 2016, the facility's regulatory requirement for 15A NCAC 02D .0958 no longer applies to Craven County. However, the facility is subject to new regulatory requirements for 40 CFR 63, Subpart PPPPP and 40 CFR 63, Subpart DDDDD. The facility's status with respect to all other regulations has not changed. For a discussion of MACT, CAM, and PSD requirements, see Section 6. The permit will be updated to reflect the most current stipulations for all applicable regulations.

The facility made several equipment and source changes where a regulatory review was required. Detail changes are noted in the above Table of Changes. Below is a summary of the changes from the permit application modifications, renewal, addendums, and any other major updates.

Title V renewal permit application 2500159.16A was sent January 28, 2016 without any changes. A significant modification permit application was sent February 12, 2016 with many changes to existing sources and the addition of new sources. With review of the application, it was noted that the existing permit contained many insignificant or significant sources that were not necessary in addition to certain parts of the toxic section. Through a very thorough review from the facility, approximately 340 insignificant activities and 10 significant sources were deleted due to removal of the sources, emissions tracked elsewhere, or there were no regulated emissions. The review also determined that there were minor changes to a few of the descriptions and updates to the sources' building locations. About 30 significant sources were reclassified as insignificant activities and five insignificant activities were reclassified as significant sources. The application requested that two additional sources be subject to MACT GG and all 13 engine test cells become subject to MACT PPPPP. There were updates to acceptable pressure drop ranges for approximately 15 control devices and all process and direct contact heaters qualified as insignificant activities.

The new sources from the significant modification are: a HVOF thermal spray booth (E0207) with a scrubber (CD-E0207A) and a cyclone (CD-E0207B), replacement of previous insignificant activity IE0089 with a new HVOF thermal spray booth (E0089) controlled by a cartridge/HEPA filter (CD-E0089), new insignificant activity ID No. ID0227 (grinding/sanding booth), and new insignificant activity ID No. ID0228 (abrasive blasting glove box). An air toxics dispersion modeling report was also submitted for the new sources but also to make updates to the permit's TAP section. The modeling demonstration was approved by the Division of Air Quality per memo dated March 21, 2016. A recommendation to the facility by DAQ permit engineers was made to remove several toxics that were not applicable or well below the AAL.

A notification for a Title V permit 502(b)(10) change 2500159.16C requested replacement for HVOC thermal spray booth ID No. E0165. A minor modification permit application 2500159.16D was sent July 12, 2016 for updates to source E0089 that included the appropriate forms and calculations. A facility email sent December 20, 2016 contained appropriate forms, operation updates, and control device information to metal spray booth E0207 located in Building 4225. The booth will have the ability to also perform as a surface pretreatment process. The booth will now be controlled by a venturi air scrubber instead of a cartridge/HEPA filter system and the surface pretreatment process will be controlled by a high efficiency cyclone.

During a facility site visit by permit engineer Richard Simpson on March 28, 2016, the facility requested that the appropriate sections of the permit be organized by "like type" sources instead of by building numbers to reduce the complexity and regulatory redundancy within the permit. Addendum 1 was sent with the appropriate calculation July 10, 2017 to reclassify significant source D0199 (adhesive coating booth) as an insignificant activity.

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

<u>NSPS</u> – The facility's horizontal fixed-roof jet fuel storage tank with a 25,000-gallon capacity (**ID No. IA0076**) is currently subject to 40 CFR 60, Subpart Kb "Standards of Performance for Volatile Organic Liquid Storage Vessels". This permit renewal does not affect this status. The source has been reclassified as an insignificant activity. There are no other NSPS sources at this facility.

<u>NESHAPS/MACT</u> – The Permittee is currently subject to the Maximum Achievable Control Technology Standards 40 CFR 63 Subpart N, GG, ZZZZ, Case-by-Case 112(j), DDDDD, and PPPPP for its existing engines, turbines, and boiler. The permit currently includes references to the requirements in each of the paragraphs of this Subpart.

- 1. 40 CFR 63, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Subpart N). This Subpart is applicable to the following tanks:
 - Building 4035 Six hard chrome plating tanks (ID Nos. T0099, T0100, T0105, T0106, T0155, and T0218) with a four-stage composite mesh pad scrubber (ID No. CR-2R).
 - The existing tanks are located at a major source of HAPs and 40 CFR 63Subpart N applies. Permit Sections 2.1 E. notes the requirements. This permit renewal does not affect this status.
- 2. <u>40 CFR 63, National Emission Standards for Aerospace Manufacturing and Rework Facilities</u> (Subpart GG). This Subpart is applicable to the following sources in their respective Buildings:
 - Building 84: Paint booth (ID No. D0069) with dry particulate filter system (ID No. CD-D0069) and associated spray gun cleaning operation
 - Building 129: Paint booth (ID No. D0061) with dry particulate filter system (ID No. CD-D0061) and paint booth (ID No. D0066) with dry particulate filter system (ID No. CD-D0066) and each booth having an associated spray gun cleaning operation
 - Building 133: Paint booth (ID No. A0019) with dry particulate filter system (ID No. CD-A0019) and paint booth (ID No. A0032) with dry particulate filter system (ID No. CD-A0032) and associated spray gun cleaning operation, both with shared electric drying oven, sermetal spray booth (ID No. A0178) with dry particulate filter system venting to activated carbon filter (ID No. CD-A0178), solvent cleaning spray booth (ID No. B0040), and abrasive blasting operation (ID No. E0080) with cartridge filter venting to HEPA filter (ID No. CD-E0080).
 - Building 137: Paint booth (ID No. C0005) with dry particulate filter system (ID No. CD-C0005), paint booth (ID No. C0056) with dry particulate filter system (ID No. CD-C0056), paint booth (ID No. C0062) with dry particulate filter system (ID No. CD-C0062), paint booth (ID No. D0008) with dry particulate filter system (ID No. CD-D0008), paint booth (ID No. D0009) with dry particulate filter system (ID No. CD-D0009), paint booth (ID No. D0036) with dry particulate filter system (ID No. CD-D0036), paint booth (ID No. D0131) with dry particulate filter system (ID No. CD-D0131), and each booth having an associated spray gun cleaning operation. Abrasive blasting operation (ID No. D0097) with cartridge filter (ID No. CD-D0097), paint stripping tank (ID No. A0145), and depainting/chemical stripping area (ID No. D0120).
 - Building 245: Paint booth (ID No. D0106) with dry particulate filter system (16 filter banks; ID No. CD-D0106), paint booth (ID No. D0129) with dry particulate filter system (8 three stage filter banks; ID No. CD-D0129) with each booth having an associated spray gun cleaning operation, and paint booth (ID No. D0226) with a 3-stage paint overspray filtration system (ID No. CD-D0226A) and carbon adsorption capture system (ID No. CD-D0226B).
 - Building 423: Laser depainting system (ID No. D0221) with associated dry particulate cartridge filter system (CD-D0221, 80 square feet of surface area) with add-on HEPA filter system (66 square feet of surface area).
 - Building 1798: Paint booth (ID No. D0052) with dry particulate filter system (6 filter banks; ID No. CD-D0052) and associated spray gun cleaning operation. Abrasive blasting operation (ID

No. D0053) with cartridge filter venting to HEPA filters (ID No. CD-D0053).

Building 3766: Abrasive blasting operation (ID No. D0184) venting thru multiple filter banks (ID No. CD-D0184).

Building 3767: Paint booth (ID No. D0056) with dry particulate filter system (ID No. CD-D0056) and associated spray gun cleaning operation

Building 4032: Paint booth (ID No. A0179) with dry particulate filter system (ID No. CD-A0179) and associated spray gun cleaning operation

Building 4034: Abrasive blasting operation (ID No. D0182) with three two-stage filter systems (ID Nos. CD-D0182A/B, CD-D0182C/D, and CD-D0182E/F), media recovery unit 1 of 2 (ID No. D0183) with two-stage filter system (ID No. CD-D0183A/B), and media recovery unit 2 of 2 (ID No. D0205) with two-stage filter system (ID No. CD-D0205A/B)

Building 4224: Paint booth (ID No. B0101) with dry particulate filter system (ID No. CD-B0101) and associated spray gun cleaning operation

Building 4225: Paint booth (ID No. E0160) with dry particulate filter system (ID No. CD-E0160) and associated spray gun cleaning operation

The existing sources are located at a major source of HAPs and 40 CFR 63Subpart GG applies. Permit Sections 2.1 A., 2.1 B., 2.1 C. and Section 2.2 A. notes the requirements. This permit renewal and modification does not affect this status.

3. <u>40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Stationary</u> <u>Reciprocating Internal Combustion Engines (Subpart ZZZZ)</u>. This Subpart is applicable to the following insignificant activity engines:

Building 83 IC0105
Building 137 IC0099, IC0100
Building 488 IC0141
Building 1006 IC0102
Building 4032 IC0104
Building 4224 IC0103
Building 4225 IE0188 and IE073

The existing engines are located at a major source of HAPs and 40 CFR 63Subpart ZZZZZ applies. The engines are in Attachment 1 of the permit. This permit renewal and modification does not affect this status.

4. <u>40 CFR 63, Subpart B, Section 112(j) National Emission Standards for Hazardous Air Pollutants for Major Sources:</u> The following insignificant activity sources are subject to 15A NCAC 2D .1109: Case-by-Case MACT:

Building 137 ID0113, ID0114, and IC0017 Building 4032 IH0005 Building 4032 IH0005 The sources were constructed prior to June 4, 2010 and are considered to be an existing boiler under this rule. The sources must meet all applicable requirements of the Subpart. The Permittee shall comply with the CAA §112(j) standard in this Section through **May 19, 2019**. This permit renewal and modification does not affect this status.

 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Major Sources: <u>Industrial, Commercial, and Institutional Boilers (Subpart DDDDD)</u>. The following insignificant activity sources shall be subject to the requirements of MACT Subpart DDDDD starting

May 20, 2019:

Building 137 ID0113, ID0114, and IC0017

Building 4032 IH0005 Building 4032 IH0005

The requirements of this standard may require action on behalf of the Permittee prior to **May 20**, **2019.** Per MACT Subpart 5D, ESBL2 must meet the requirements listed in Section 2.1.E.5. of the permit and all applicable requirements of the Subpart.

6. <u>40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands (Subpart PPPPP).</u> This Subpart is applicable to the following sources in their respective Buildings:

Building 133 Four distillate/distillate equivalent fuel-fired turbine engines-APU test cells (ID Nos. A0001, A0002, A0003, and A0004)

Building 137 Seven distillate fuel/distillate equivalent fuel-fired turbine engines-APU test cells (ID Nos. D0116, D0147, D0148, D0149, D0150, D0151, D0152)

Building 3402 Distillate/distillate equivalent fuel-fired turbine engine APU test cell (ID No. A0077)

Building 4188 Distillate fuel/distillate equivalent fuel-fired turbine engine APU test cell (ID No. A0058)

The facility is a major source of HAP and operates engine test cells/stands, therefore the facility is subject to 40 CFR 63, Subpart PPPPP. Each of the engine or test cells is used exclusively for testing combustion turbine engines. Per §63.9290(d)(1), the emission sources do not have to meet the requirements of this subpart and of subpart A of this part. This is noted in Section 2.1 G. of the permit.

<u>PSD</u> – The facility is a PSD major facility for VOCs. This permit renewal and modification does not affect this status.

<u>112(r)</u> – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal and modification does not affect this status.

<u>CAM</u> – 40 CFR 64 requires that a compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. CAM is not applicable for this facility.

VII. Facility Wide Air Toxics (State Enforceable Only)

North Carolina General Statute (NCGS) 143-215.107(a) was approved on June 28, 2012 and this Act exempts from State Air Toxics those sources of emissions that are subject to certain Federal emissions requirements under 40 CFR Part 61 (NESHAP), Part 63 (MACT), or Case-by-Case MACT pursuant to 42 U.S.C. §7412(j). This statute was placed into the North Carolina State Air Toxics regulations on May 1, 2014 under Regulation 15A NCAC 2Q .0702(a)(27).

Pursuant to 15A NCAC 02D .1100, 15A NCAC 2Q .0700, and in accordance with the approved application for an air toxic compliance demonstration, the emission limits contained in the current permit shall not be exceeded. To ensure compliance with these regulations the Permittee shall maintain records of production rates, throughput, material usage, and other process operational information as is necessary to determine compliance with the air toxic emission limits specified above for a minimum of five years from the date of recording.

The previous permit Section of 2.2 B. (Toxic Air Pollutant Emission Sources) has been reorganized based on a February 2016 facility air toxic modeling demonstration and a request from the facility to replace and/or remove TAP emissions limitations in Permit No. 05506T43 with new limitations based on the modeling presented in the report. The request triggers modeling requirements to evaluate those toxics whose rates are expected to exceed the levels outlined in 15A NCAC 2Q .0700. The modeling report was approved by the Division of Air Quality per memo dated March 21, 2016. A facility letter dated June 20, 2016 was also submitted requesting removal of applicable toxic rates.

The modeling adequately demonstrates compliance, on a source-by-source basis, for all toxics modeled. Twenty-two air toxics were evaluated in the modeling. A total of 104 point sources and 17 volume sources were identified. Any sources from the proposed modifications were included in the modeling demonstration. The table below shows the maximum impact for each toxic from the modeling results.

Maximum Impacts for the Fleet Readiness Center East, Craven County, NC

Toxic Pollutant (CAS No.)	Averaging Period	AAL (mg/m³)	Maximum Concentration (mg/m³)	Percent (%) of AAL
Acetic Acid (64-19-7)	Hourly	3.7	0.14	3.9%
Ammonia (7664-41-7)	Hourly	2.7	0.035	1.3%
Benzene (71-43-2)	Annual	1.2E-04	4.0E-05	33.3%

Bioavailable Chromate Pigments as Chromium (VI) Equivalent (BIOCR6)	Annual	8.3E-08	2.0E-08	24.1%
1,3-Butadiene (106-99-0)	Annual	4.4E-04	1.10E-05	2.5%
Cadmium (7440-43-9)	Annual	5.5E-06	7.5E-02	1.4%
Cresol (1319-77-3)	Hourly	2.2	0.070	3.2%
Di(2-Ethylhexyl)Phthalate (DEHP) (117-81-7)	Daily	0.03	0.0008	2.7%
Ethylenediamine	Daily	0.3	0.00075	0.2%
(107-15-3)	Hourly	2.5	0.074	3.0%
Fluorides	Daily	0.016	0.00011	0.7%
(16984-48-8)	Hourly	0.25	0.0044	1.8%
Formaldehyde (50-00-0)	Hourly	0.15	0.014	9.5%
Maleic Anhydride	Daily	0.012	0.00066	5.5%
(108-31-6)	Hourly	0.1	0.074	74.1%
Methyl Ethyl Ketone	Daily	3.7	0.0096	0.3%
(78-93-3)	Hourly	88.5	0.83	0.9%
Methyl Isobutyl Ketone (108-10-1)	Hourly	30	0.18	0.6%
Methylene Chloride	Annual	2.4E-02	4.0E-04	1.7%
(75-09-2)	Hourly	1.7	0.21	12.2%
Nickel Metal (7440-02-0)	Daily	6.0E-03	6.4E-05	1.1%
Nickel, Soluble Compounds, as Nickel (NICKSOLCP)	Daily	6.0E-04	6.1E-05	10.1%

Non-specific Chromium (VI) Compounds, as Chromium (VI) Equivalent (NSCR6)	Annual	8.3E-08	8.2E-08	98.8%
Phenol (108-95-2)	Hourly	0.95	0.078	8.3%
Toluene	Daily	4.7	0.0077	0.2%
(108-88-3)	Hourly	56	0.81	1.4%
Toluene Diisocyanate, 2,4- (584-84-9)	Hourly	0.0002	6.6E-05	33.0%
Xylene (1330-20-7)	Hourly	65	0.32	0.5%

Based on the above results, updated permit Section 2.2 B.1. includes limitations for non-specific chromium (VI) compounds for non-MACT/NESHAP source by source limits. All other previous source by source TAPs were well below the AAL and were deleted. Updated permit Section 2.2 B.2.a. includes facility wide TAPs emission limitations above 50% AAL. The TAPs listed are maleic anhydride and non-specific chromium (VI) compounds including all MACT/NESHAP sources. All other previous facility wide TAPs are well below the AAL and deleted. Updated permit Section 2.2 B.2.b.-p. includes facility wide 15A NCAC 02D .1104 TAPs AAL limitations for nickel metal and nickel, soluble compounds, as nickel. The source will continue to comply with all requirements for 15A NCAC 02D .1104 and 15A NCAC 2Q .0700.

VIII. Facility Emissions Review

The actual emissions of the last five years are listed in the first page of this review. As noted above, approximately 340 insignificant activities and 10 significant sources were deleted. About 30 significant sources were reclassified as insignificant activities and five significant sources were reclassified as insignificant activities. The requested modifications replaced and/or added eight sources. There were changes in Title V potential emissions for this renewal and modification.

IX. Compliance Status

Five year compliance history

On August 14, 2015, Mr. Robert Bright of the WARO office conducted a full compliance evaluation of the facility. A review of records from December 2013 through July 2015 indicated that the required documentation for the July 2015 monthly inspections via the regulations/permit conditions for 15A NCAC 02D .0512, 15A NCAC 02D .0521, 15A NCAC 02D .0958, could not be provided. The facility was issued a Notice of Deficiency in an August 23, 2017 letter.

During the most recent inspection conducted on August 1, 2017, Robert Bright of the WARO indicated that the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of inspection.

X. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. There is no affected state/local program within 50 miles of the facility.

EPA's 45 Day Review period

Ms. Heather Ceron (U.S. EPA, Region IV) was provided a PROPOSED permit for review on September ##, 2017. EPA 45-day review period ended on January 26, 2017. No comments were offered or received.

Public Notice

The 30-day public notice of the proposed permit was posted on the NCDAQ website on September ##, 2016. No comments were offered or received.

XI. Other Regulatory Considerations

- A P.E. seal is NOT required for this application.
- A consistency determination is required and was included along with the application. The determination letter from Mr. D. M. Elliott of the Facilities Development Department with the Marine Air Corps Station Cherry Point, states that the modification to the Air Permit is consistent with the Master Development Plan and the local applicable zoning ordinances.
- An application fee of \$904.00 is required and was received by the DAQ for the two modifications on February 12, 2016 and July 7, 2016.
- Craven County has not triggered increment tracking under PSD for any pollutants, so no tracking is required.

XII. Recommendations

The permit renewal and modification applications for Fleet Readiness Center East (FRCE) in Cherry Point, Craven County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 05506T44.